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(54) WIRELESS POWER SYSTEM WITH AMBIENT FIELD NULLING

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(57)ABSTRACT

A wireless power system uses a wireless power transmitting device to transmit wireless power to wireless power receiving devices. The wireless power transmitting device has wireless power transmitting coils that extend under a wireless charging surface. Non-power-transmitting coils and magnetic sensors may be included in the wireless power transmitting device. During wireless power transfer operations, control circuitry in the wireless power transmitting device adjusts drive signals applied to the coils to reduce ambient magnetic fields. The drive signal adjustments are made based on device type information and other information on the wireless power receiving devices and/or magnetic sensor readings from the magnetic sensors. In-phase or out-of-phase drive signals are applied to minimize ambient fields depending on device type.

